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## WATER SUPPLY OUTLOOK

FEDERAL - STATE - PRIVATE COOPERATIVE SNOW SURVEYS

for
IDAHO

UNITED STATES DEPARTMENT of AGRICULTURE...SOIL CONSERVATION SERVICE, and

IDAHO STATE RECLAMATION ENGINEER

Data included in this report were obtained by the agencies named above in cooperation with Federal, State and private organizations listed inside the back cover of this report.

FEB. 1, 1966

#### UNITED STATES DEPARTMENT OF AGRICULTURE - SOIL CONSERVATION SERVICE

To Recipients of Water Supply Outlook Reports:

Most of the usable water in western states originates as mountain snowfall. This snowfall accumulates during the winter and spring, several months before the snow melts and appears as streamflow. Since the runoff from precipitation as snow is delayed, estimates of snowmelt runoff can be made well in advance of its occurrence. Streamflow forecasts published in this report are based principally on measurement of the water equivalent of the mountain snowpack.

Forecasts become more accurate as more of the data affecting runoff are measured. All forecasts assume that climatic factors during the remainder of the snow accumulation and melt season as they affect runoff will add to be an effective average. Early season forecasts are therefore subject to a greater change than those made on later dates.

The snow course measurement is obtained by sampling snow depth and water equivalent at surveyed and marked locations in mountain areas. A total of about ten samples are taken at each location. The average of these are reported as snow depth and water equivalent. These measurements are repeated in the same location near the same dates each year.

Snow surveys are made monthly or semi-monthly from January 1 through June 1 in most states. There are about 1400 snow courses in Western United States and in the Columbia Basin in British Columbia. In the near future, it is anticipated that automatic snow water equivalent sensing devices along with radio telemetry will provide a continuous record of snow water equivalent at key locations.

Detailed data on snow course and soil moisture measurements are presented in state and local reports. Other data or reservoir storage, summaries of precipitation, current streamflow, and soil moisture conditions at valley elevations are also included. The report for Western United States presents a broad picture of water supply outlook conditions, including selected streamflow forecasts, summary of snow accumulation to date, and storage in larger reservoirs.

Snow survey and soil moisture data for the period of record are published by the Soil Conservation Service by states about every five years. Data for the current year is summarized in a West-wide basic data summary and published about October 1 of each year.

Listed below are water supply outlook reports based on Federal-State-Private Cooperative snow surveys. Those published by the Soil Conservation Service may be obtained from Soil Conservation Service, Room 507, Federal Building, 701 N. W. Glisan, Portland, Oregon 97209.

#### PUBLISHED BY SOIL CONSERVATION SERVICE

	PUBLISHED BY SO	IL CONSERVATION SERVI	CE
REPORTS	ISSUED	LOCATION	COOPERATING WITH
RIVER BASINS			
WESTERN UNITED STATES	_ MONTHLY (FEBMAY)_	PORTLAND, OREGON	ALL COOPERATORS
BASIC DATA SUMMARY	OCTOBER 1	PORTLAND, OREGON	ALL COOPERATORS
STATES			
ALASKA	MONTHLY (MARMAY)	PALMER, ALASKA	ALASKA S.C.D.
AR I ZON A	SEMI-MONTHLY	PHOENIX, ARIZONA	SALT R. VALLEY WATER USERS ASSOC. ARIZ. AGR. EXP. STATION
GOLORAGO AND NEW MEXICO	MONTHLY (FEBMAY)	FORT COLLINS. COLORAD	O — COLO. STATE UNIVERSITY COLO. STATE ENGINEER N. MEX. STATE ENGINEER
IOAHO	MONTHLY (JANJUNE	) Boise, Idaho	IDAHO STATE RECLAMATION ENGINEER
MONTANA	MONTHLY (JAN JUNE	) BOZEMAN, MONTANA	MONT. AGR. EXP. STATION
NEVAOA	MONTHLY (JANMAY).	RENO, NEVADA	NEVAGA DEPT. OF CONSERVATION AND NATURAL RESOURCES - DIVISION OF WATER RESOURCES
ORE GON	MONTHLY (JANJUNE)	) PORTLAND, OREGON	OREG. STATE UNIVERSITY OREGON STATE ENGINEER
UTAH	MONTHLY (JANJUNE	) SALT LAKE CITY, UTAH_	UTAH STATE ENGINEER
WASHINGTON-	MONTHLY (FEB JUNE	) _ SPOKANE, WASHINGTON	WN. STATE DEPT. OF CONSERVATION
WYOMING	MONTHLY (FEBJUNE).	CASPER, WYOMING	WYOMING STATE ENGINEER
۵			
	PUBLISHED	BY OTHER AGENCIES	
REPORTS	ISSUED		AGENCY
BRITISH COLUMBIA	MONTHLY (FEBJUNE).		CES SERVICE, DEPT. OF LANOS. ER RESOURCES, PARLIAMENT BLDG., , CANADA
CALIFORNIA	MONTHLY (FEBMAY)	CALIF. DEPT. O SACRAMENTO, CA	F WATER RESOURCES, P.O. BOX 388, LIF.

## WATER SUPPLY OUTLOOK

FEDERAL - STATE - PRIVATE COOPERATIVE SNOW SURVEYS for IDAHO

Report prepared by

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and

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SOIL CONSERVATION SERVICE SNOW SURVEY SECTION P.O. BOX 38, BOISE, IDAHO 83701

Issued by

LEE T. MORGAN

STATE CONSERVATION IST
SOIL CONSERVATION SERVICE
BOISE. IDAHO

CARL E. TAPPAN
STATE RECLAMATION ENGINEER
DEPARTMENT OF RECLAMATION
BOISE, IDAHO



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GREAT BASIN - Snow Course Location Map and Index Snow Survey Data for Bear River, Montpelier Creek and Mink Creek Watersheds



## WATER SUPPLY OUTLOOK for IDAHO



#### GENERAL SUMMARY FOR FEBRUARY 1, 1966

Snowfall during the month of January was slightly above normal reducing some of the deficiency occurring before the first of the year. Particularly heavy storms occurred in the first week of January. Snow cover is spotted and varies from 63% of normal on the Salmon Falls Creek to 120% on the Palouse River near Moscow. In general, however, snow cover is below normal throughout the state as of the first of February. Usually about two-thirds of the total snow pack for the season is already down by February 1st.

Soil moisture sites indicate that moisture conditions beneath the snow pack are better than average. There has been no snow-melt at the higher elevations such as occurred last year. Though the soil beneath the snow pack is not saturated, very little snow-water will be absorbed by the soil this spring when the major snow-melt begins. The prospects for a normal water supply in Idaho are good when the combination of near normal snow pack, good soil moisture and excellent carryover storage in the reservoirs are considered.

The streamflow forecasts made for the April through September period are considerably higher than the snow cover would indicate. This is true because the high water producing drainages on each river have good snow water

and soil moisture conditions. The forecasts made this early in the season are subject to a greater percentage of error than those made when the maximum snow pack is down for the season. In general, corrections from these forecasts are relatively slight unless a major change in storm trends occur.

The solar-powered telemetry measurement system at Trinity Mountain continues to operate efficiently. The readings from this site are varying in accordance with those made on the ground at similar snow courses.

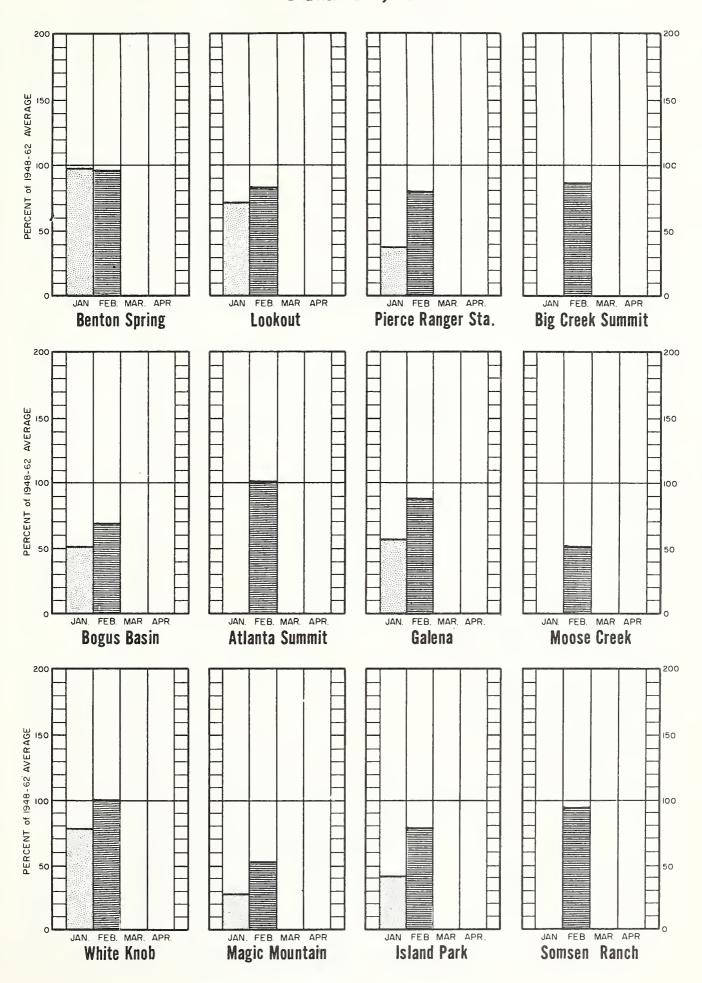
Soil temperatures are normal for this time of year, and soils, where protected by snow cover, are not frozen. The smaller streams, such as Willow Creek and Sand Creek in southeastern Idaho, do not have enough snow cover below 6,000 feet to prevent soil freezing. Frozen soil is a hazard which contributes to heavy runoff if warm rains and snow-melt occur suddenly. The snow pack on these two drainages, however, does not pose a threat from the standpoint of snow water on the watershed at this time.

#### SNOW WATER DEPTHS ACCUMULATION

For Selected Snow Courses

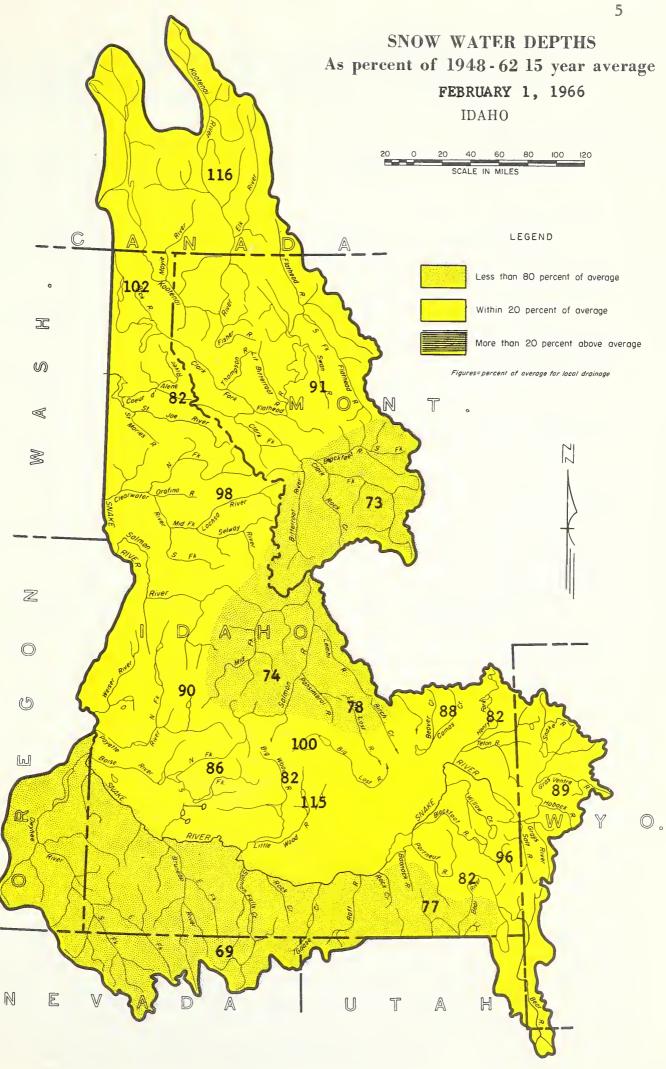
As Compared To 1948-62 15Yr. Average

### FEBRUARY 1, 1966



RIVER BASIN WATERSHED	NO.OF COURSES AVERAGED		AS PERCENT OF:
UPPER COLUMBIA RIVER BASIN			
Kootenai River Pend Oreille River Clark Fork River Flathead River Priest River	10 19 14 5 2-4	109 61 53 73 83	116 81 73 91 102
Spokane River	1-8	73	82
LOWER SNAKE RIVER BASIN			
Palouse River Clearwater River Salmon River Lemhi River	5 6-17 9-16 7	96 65 44 36	120 98 74
MIDDLE SNAKE RIVER BASIN - Northside			
Little Lost River Big Lost River Little Wood River Big Wood River Camas-Long Tom-Canyon Creeks Boise River Payette River Weiser River	5 1-8 3-4 7-9 3 11-16 9-15	36 39 48 39 40 42 50	78 100 115 82  86 90
MIDDLE SNAKE RIVER BASIN - Southside	18		69
Raft River Goose-Trapper Creeks Salmon Falls Creek Bruneau River Owyhee River - Idaho	1-4 1-3 8-10 4 4	47 48 39 44 41	64 89 63 80 67
UPPER SNAKE RIVER BASIN			
Upper Snake - Wyoming Camas-Beaver Creeks Medicine Lodge Creek Henrys Fork River Teton River Blackfoot River Portneuf River	20 2 2 4 2-4 3-4 2	58 48 37 47 50 55	89 88  82 62 96 82
GREAT BASIN			
Bear River Montpelier Creek Mink Creek Cub River	9 4 3-7 2	60 46 42 58	97  70 79
Malad River	2	42	77

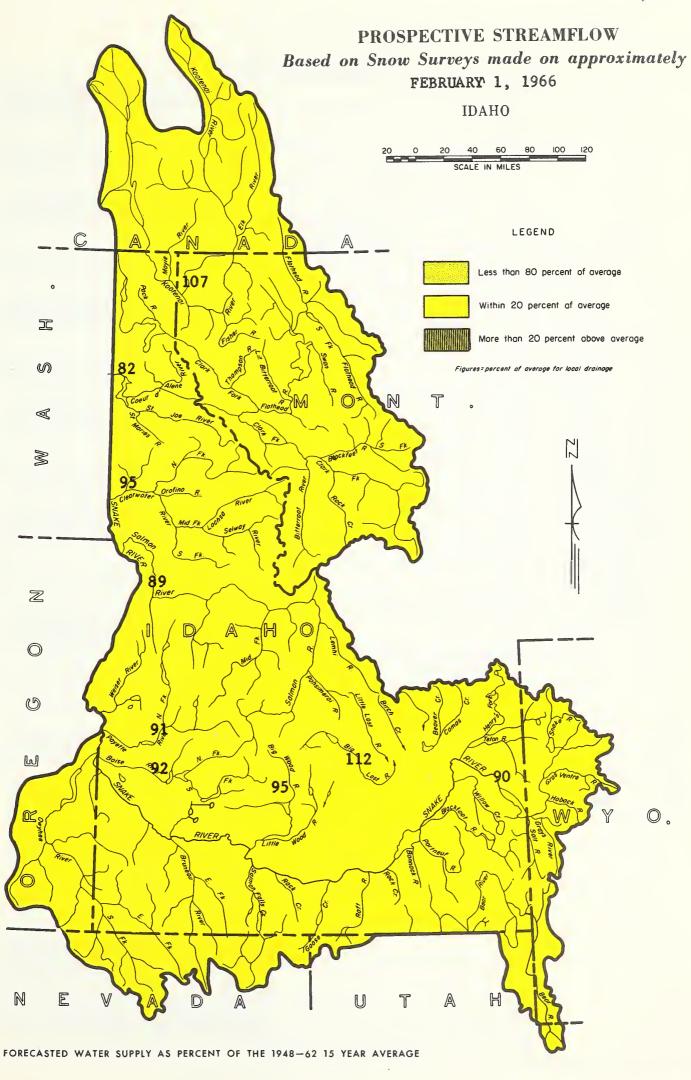




STREAM and/ar FORECAST POINT		FORECAST THIS YEAR	FORECAST PERIOD	LAST YEAR	1948-1962 AVERAGE	THIS YEAR AS PERCENT OF AVERAGE
KOOTENAI RIVER						
Leonia	(at)	9970	Apr-Sep	9133	9327	107
SPOKANE RIVER						
Post Falls $\underline{1}/$	(at)	2800	Apr-Sep	3345	3413	82
SNAKE RIVER						
Heise 2/	(nr)	3500	Apr-Sep	5266	3868	90
BIG LOST RIVER						
Mackay 3/	(nr)	165	Apr-Sep	334	147	112
BIG WOOD RIVER						
Hailey <u>4</u> /	(at)	300	Apr-Sep	584	317	95
BOISE RIVER						
Boise <u>5</u> /	(nr)	1500	Apr-Sep	2783	1632	92
PAYETTE RIVER						
Horseshoe Bend $\underline{6}/$	(nr)	1800	Apr-Sep	2810	1988	91
OWYHEE RIVER						
Lake Owyhee net inflow 7/		225	Apr-Sep	411	381	59
SALMON RIVER						
Whitebird	(at)	6200	Apr-Sep	10254	6949	89
CLEARWATER RIVER						
Spalding	(at)	8800	Apr-Sep	10160	9215	95

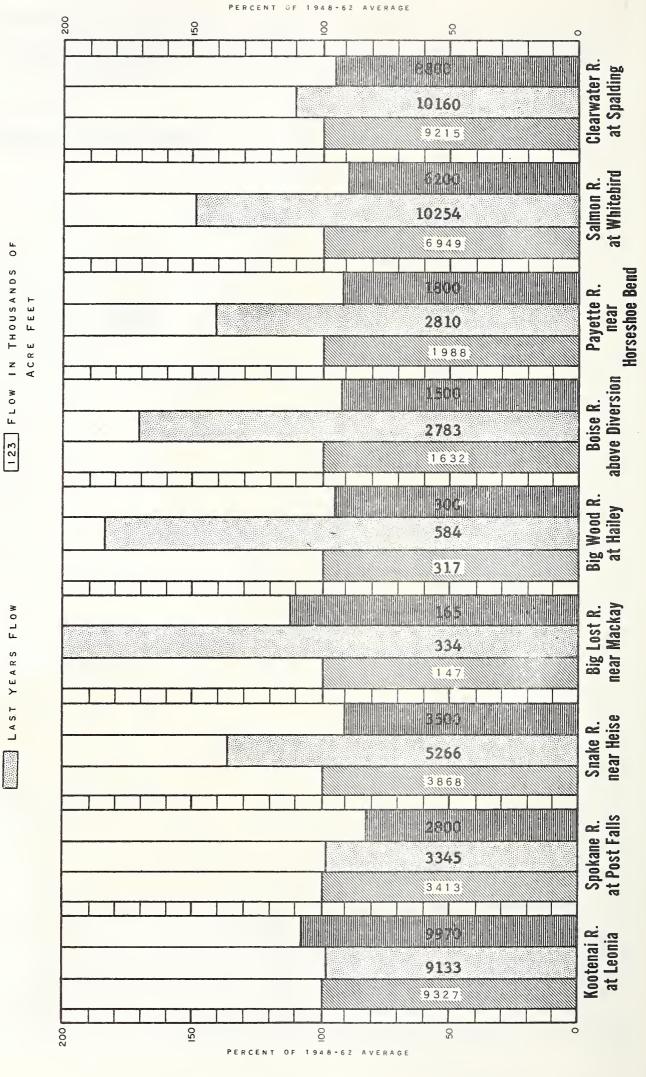
<sup>(</sup>c) Assuming normal meteorological conditions.

<sup>1/</sup> Observed flow corrected for storage in Coeur d'Alene Lake and diversions by Spokane Valley Farms Company and Rathdrum Prairie canals. 2/ Corrected for storage in Jackson Lake and Palisades. 3/ Observed flow corrected for storage in Mackay Reservoir and diversion in Sharp Ditch. 4/ Combined discharge Big Wood River and Big Wood Slough corrected for diversions. 5/ Corrected for storage in Arrowrock, Anderson Ranch and Lucky Peak. 6/ Corrected for storage in Cascade and Deadwood Reservoirs. 7/ U.S.B.R. records of inflow.



STREAMFLOW FORECASTS (April through September period)

Based on Snow Surveys made on approximately



# VALLEY PRECIPITATION $\underline{1}/$ Division Averages and Departures

In Inches

		Fall	Winter			
DRAINAGE	SepOc	tNov. 1965	Dec. 1965-Jan. 19			
DIVISIONS	Observed	Departure 2/	Observed	Departure 2/		
Kootenai, Canada & U. S.	6.25	-0.67	8.26	+1.51		
Flathead	4.72	-0.87	4.18	-0.23		
Clark Fork	3.36	+0.51	1.61	-0.33		
Pend Oreille-Spokane	5.44	-3.50	6.83	-1.72		
Upper Snake	4.93	+0.23	3.07	-1.57		
Snake River Plain	1.72	-0.27	1.35	-0.64		
Salmon-Payette-Boise	3.17	-1.24	3.26	-1.84		
Clearwater	4.46	-2.58	3.83	-2.00		
Southeastern Oregon	2.39	+0.19	0.99	-1.46		

Preliminary analysis by U. S. Weather Bureau from data furnished by Meterological Service of Canada and U. S. Weather Bureau.

<sup>2/</sup> Departure from 15-year (1948-62 drainage division average.

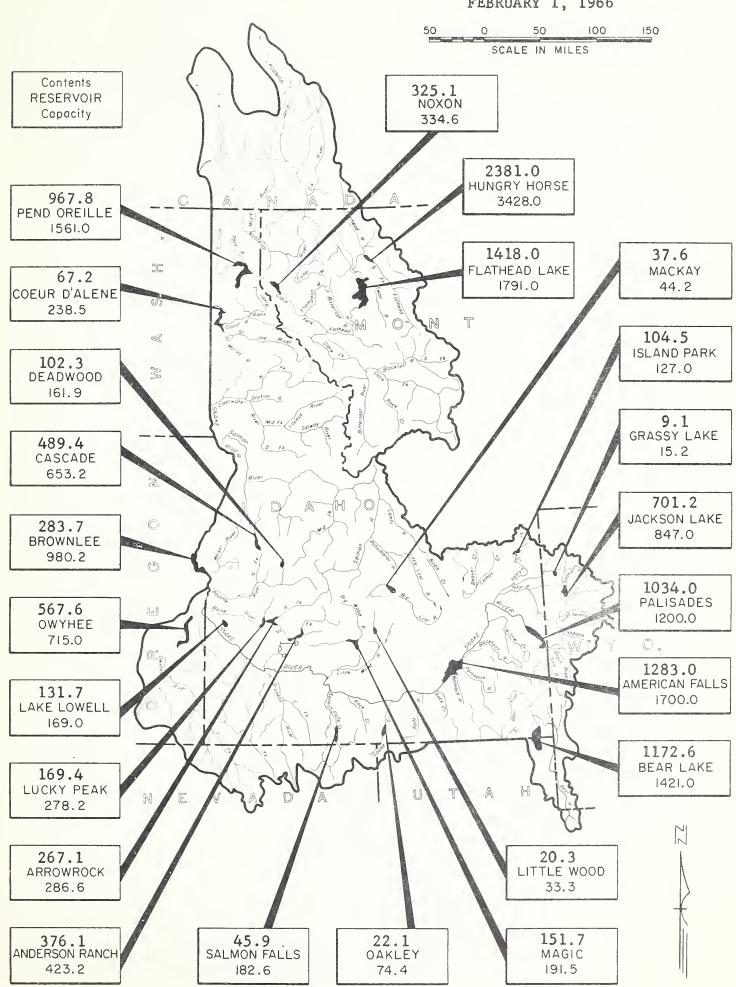
### RESERVOIR STORAGE (1,000 Ac. Ft.)

RESERVOIR	USABLE CAPACITY	М	EASURED (First of Mor	ith)
RESERVOIR	USABLE CAPACITY	THIS YEAR	LAST YEAR	1948-62 AVERAGE
UPPER COLUMBIA BASIN	MI Zacogan			
Clark Fork - Pend Oreille	2/00 0	0001 0	0011 0	0600 44
Hungry Horse	3428.0	2381.0	2811.0	2693.4*
Flathead	1791.0	1418.0	1384.0	1042.9
Pend Oreille	1561.0	967.8	1042.9	728.1
Noxon	334.6	325.1	331.0	
Spokane Coeur d'Alene	238.5	67.2	227 5	120.0
Coedi d Alene	230.3	07.2	237.5	130.8
SNAKE BASIN				
Snake				
Jackson Lake	847.0	701.2	610.5	417.6
Palisades	1200.0	1034.0	972.6	
American Falls	1700.0	1283.0	1241.8	1301.0
Island Park	127.0	104.5	116.5	98.6
Grassy Lake	15.2	9.1	12.0	11.6
Brownlee	980.2	283.7	881.7	
Goose-Trapper Creeks				
0akley	74.4	22.1	16.9	12.5
Salmon Falls Creek				
Salmon Falls	182.6	45.9	36.2	17.8
Big Lost				
Mackay	44.2	37.6	34.8	28.5
Big Wood				
Magic	191.5	151.7	115.8	97.4
Little Wood	200	00.0	10.0	
Little Wood	30.0	20.3	18.9	
Fish Creek Carey Valley	14.4	8.7		
Boise	14.4	0.7		
Anderson Ranch	423.2	376.1	358.5	163.4
Arrowrock	286.6	267.1	282.3	196.1
Lucky Peak	278.2	169.4	118.0	190.1
Lake Lowell (Deer Flat)	169.0	131.7	143.5	89.4
Owyhee	103.0	131.7	143.3	07.4
Owyhee	715.0	567.6	665.8	752.4
Payette	,			
Cascade	653.2	489.4	441.0	
Deadwood	161.9	102.3	93.0	65.7
GREAT BASIN				
var de sentin de de deren de Ser de de Se V english de sentin de				
Bear				
Bear Lake	1421.0	1172.6	905.7	883.7
				,
*Period of record.				

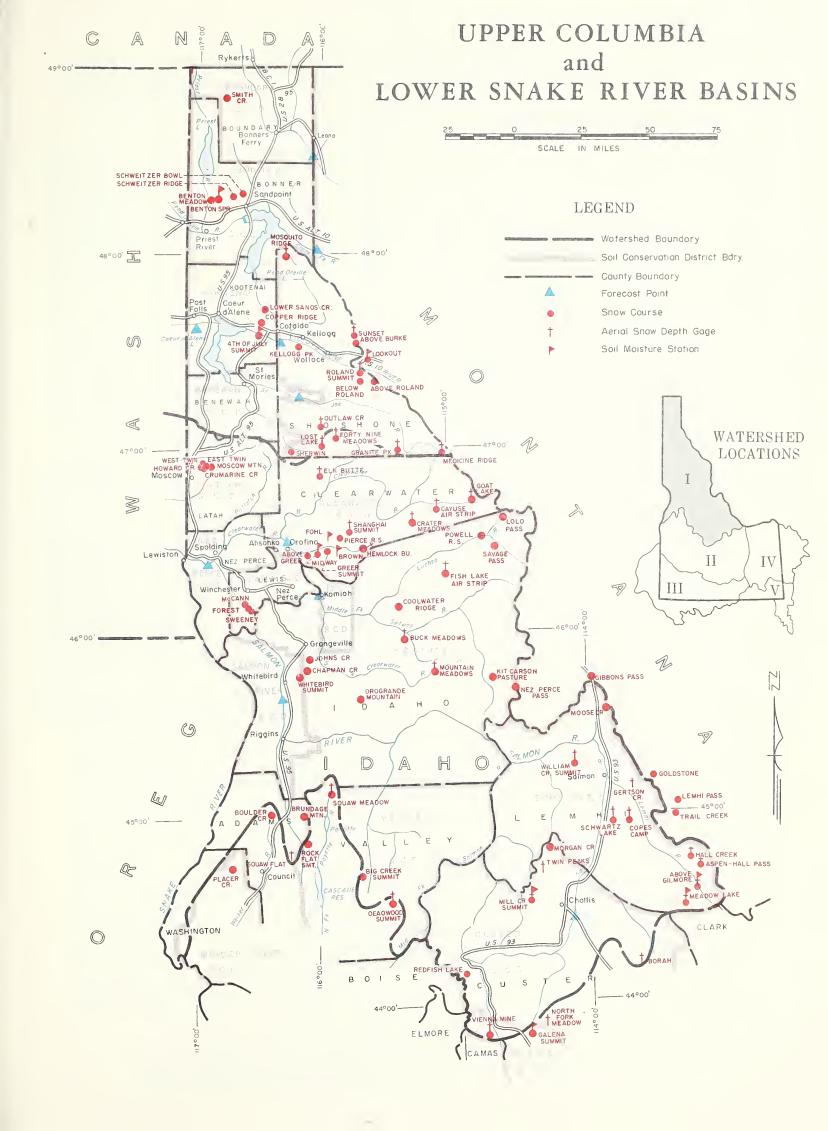
## RESERVOIR STORAGE

USABLE CONTENTS (1,000 Acre Feet)

FEBRUARY 1, 1966







## INDEX to SNOW COURSES

NO.	STAT	TE NAME	SEC.	0 R	RGE.	ELEV.	ND.	STAT	E NAME	SEC.	TWP.	RGE.	ELEV.
	J	JPPER COLUMI	BIA BA	ASIN	Ī				CLEARWATER RIVE	2			
		KOOTENAI RIVER					16C11 16C14m	I		14 11	35N 35N	2E 3E	1240 3100
16A1	I	Smith Creek	29	64N	3W	4800	15D5A 15C3A 15C7	I T	Cayuse Airstrip	26 4 32	31N 38N 33N	8E 11E 8E	5600 3700 6200
		PEND OREILLE - PI	RIEST RIV	∨ E R			15C9A 16C15A	I	Crater Meadows	2	37N 40N	9E 3E	6100 5550
16A2 16A3M	I		27 30	58N 58N	4W 3W	2344 4900	15C2A 15C8m	I		35 16	35N 36N	11E 5E	5000 3450
16A6	I	Schweitzer Bowl	20	58N	2W	4500	16C9	ı		1	32N	3W	4550
16A5	Ι	Schweitzer Ridge	19	58N	2 W	6100	15B3A 14C9A	I	,	6 <b>4</b>	43N 38N	5E 13E	5000 6600
		SPOKANE RIVER					16C13	I	Greer Summit	13	35N	2 E	3000
15B8	I	Above Burke	11	48N	5E	4100	15C6A 14D3	I		7 4	36 N 27 N	7E 16E	5500 5020
15B7	I		35	47N	6 E	4350	14C5	1	Lolo Pass	16	38N	15E	5230
15B6 16B2	I		34 6 & 7	47N 50N	6 E 1W	3770 4800	15B14A 16C8	I		16 25	43N 33N	4E 3W	6000 4300
16B3M	I		6	49N	1W	3100	16C12M		Midway	14	35N	2E	2200
15B13A	I		3	42N	8 E	6000	15D6A	I	Mountain Meadows	9	27N	10E	6300
16B5A 15B2M	I		19 4	48N 47N	3 E 6 E	5560 5250	14D1	M		25	1S	24W	6575
16B1	I		32	51N	1W	3400	15D4 15C5	I		24	27N 36N	6E 5E	7800 3170
15B4A	I		24		10 E	6150	14C6	Ī	0	33	37N	14E	4230
16A4A	I	. 0	5 19	54N 44N	2 E 5 E	5110	14C4	I	Savage Pass	18	36 N	15E	6600
15B12A 15B5A	I		26	47N	6 E	3750 5200	15C4A 16C10	I	0	7 1	37N 32N	6 E 3 W	4600 4435
16C1	I		28 & 33	42N	1E	3200	10010	_	bweeney	1	32.11	34	4433
15B9A	Ι	Sunset	28	49N	5 E	5600			SALMON RIVER				
							13E19MA		Above Gilmore	13	13N		8200
		LOWER SNAK	E BAS	IN			13E21A 15E2	I		6 24	16N 15N	28 E 5 E	8110 6600
							13E8a	ī	0	21	10N	23E	8250
		PALOUSE RIVER					16 D6	I	Brundage Mountain	7	19N	3E	7700
							16D2 13E17A	I	Chapman Creek	16 36	29N 18N	2E 22E	4215 7500
16C6 16C3	I	Crumarine Creek East Twin	24 13	40 N 40 N	5W 5W	3500 4000	13D17a	I	Copes Camp Gertson Creek	22	22N	23E	8050
16C5	I	Howard Creek	14	40N	5W	3500	13D2	М	Gibbons Pass	4	2S	19W	7100
16C2	Ī	Moscow Mountain	18	40N	4W	4800	13D9	M	Gold Stone	11	8S	1.6 W	8100
16C4	I	West Twin	14	40N	5W	4200	13E20A 16D3	I	Hall Creek Johns Creek	1 9	16 N 29 N	27E 2E	7560 3805
							13E1	М		9	10 S	15W	7480
							13E18MA	_		24	13N	26 E	9100
							14E1MA 13D16	I		8 22 & 26	13N 27N	17E 21E	8870 6200
							14E4	I	Morgan Creek	32	18N	19E	7580
							14E2	I	Redfish Lake	3	9N	13E	6600
							13E16A 13E2	I M	Schwartz Lake	34	18N 10S	22E 15W	8500
							13E2 14E3a	M I	Trail Creek Twin Peaks	15 28	105 15N	15W	7090 10300
							14F4A	Ī		32	6N	14E	8900
							16D5	Ī		17	29N	2E	4390
							14D4	I	Williams Creek Summit	34	21N	20E	7800

#### LEGEND

#### Numbering System (example)

10J7	SNOW COURSE ONLY.
10J7P	SNOW COURSE AND PRECIPITATION GAGE.
10J7M	SNOW COURSE AND SOIL MOISTURE STATION.
10J7A	SNOW COURSE AND AERIAL MARKER.
1 D J 7 M A	SNOW COURSE, SOIL MOISTURE STATION AND AERIAL MARKER.
10J7MP	SNOW COURSE, SOIL MDISTURE STATION AND PRECIPITATION GAGE.
10J7 m	SOIL MOISTURE STATION ONLY.
10J7 a	AERIAL MARKER ONLY.
10J7 p	STORAGE PRECIPITATION GAGE ONLY.

CURRENT INFORMATION PAST RECORD

DRAINAGE BASIN and SNOW COURSE

NAME

NO. ELEVATION

CURRENT INFORMATION

PAST RECORD

WATER CONTENT (Inches)

CONTENT (Inches)

LAST YEAR AVERAGE b

#### UPPER COLUMBIA RIVER BASIN

PEND OREILLE - PRIEST R	IVER						
Benton Meadow	16A2	2344	1/31	24	6.7	8.9	5.6
Benton Spring	16A3	4900	1/31	46	14.1	15.7	14.7
Schweitzer Bowl	16A6	4500	1/28	74	21.3	23.3	
Schweitzer Ridge	16A5	6100	1/28	92	29.2	38.3	
ORGINAL DELEGA							
SPOKANE RIVER							
#Forty-nine Meadows (A)	15B3	5000	1/29	70	21.3	28.0	
Fourth of July Summit	16B3	3100	2/1	28	8.3	8.9	
Granite Peak (A)	15B13	6000	1/30	93	28.3	40.9	
Halo Lake (A)	15C10	6600		Delayed			
Lookout	15B2	5250	1/31	71	21.6	27.7	26.4
#Lost Lake (A)	15B14	6000	1/30	92	28.0	49.1	
Medicine Ridge (A)	15B4	6150	1/30	115	35.0	46.4	
Outlaw Creek (A)	15B12	3750	1/29	42	12.4	11.6	
Sherwin	16C1	3200	1/29	38	10.0	12.4	
	LOWE	R SNAK	E RIV	ER BASIN			
PALOUSE RIVER							
Crumarine Creek	16C6	3500	1/30	30	8.2	8.3	5.8*
East Twin	16 C3	4000	1/30	42	13.2	12.3	10.1*
Howard Creek	16 C5	3500	1/28	24	6.7	6.3	3.6*
Moscow Mountain	16 C2	4800	1/30	48	14.0	15.8	14.0*
West Twin	16C4	4200	1/28	33	8.8	10.5	8.8*
	100.		-/ -0	33	0.0	10 , 5	0.0
CLEARWATER RIVER							
Above Greer	16C11	1240	1/31	0	0.0	0.5	***
Buck Meadows	15D5	5600	1/26	46	10.8	21.5	
Cayuse Airstrip (A)	15C3	3700	1/29	35	10.4	14.4	8.0*
Coolwater Mountain (R)	15C7	6200	2/1		11.0		***
Crater Meadows (A)	15C9	6100	1/30	72	21.9	40.9	
Elk Butte (A)	16C15	5550	1/29	83	25.2	34.4	
Fish Lake Airstrip (A)	15C2	5000	1/29	85	25.8	35.8	27.1*
Forest	16C9	4550	1/27	28	6.8	8.0	6.0*
Forty-nine Meadows (A)	15B3	5000	1/29	70	21.3	28.0	
Goat Lake (A)	14C9	6600	1/30	86	26.1	42.3	
#Granite Peak (A)	15B13	6000	1/30	93	28.3	40.9	
Greer Summit	16C13	3000	1/31	T	$\mathbf{T}$	2.7	
#Halo Lake (A)	15C10	6600		Delayed			
Hemlock Butte (A)	15C6	5500	1/29	93	28.3	46.0	
Hemlock Butte (SP)	15C6	5500	2/1		20.4		
Hemlock Butte (R)	15C6	5500	2/1		23.1		

<sup>(</sup>b) 1948-62, 15 year period. \*Not located directly on this drainage. \*Estimated 1948-62, 15 year Average. (A) Aerial observation: Water content estimated. (SP) Pressure Pillow snow-water equivalent. (R) Radioactive Gage snow-water equivalent.

SNOW	CU	RRENT INFOR	PAST RECORD				
DRAINAGE BASIN and SNOW	DATE OF	SNOW DEPTH	WATER CONTENT	WATER CONT	ENT (Inches)		
NAME	NO.	ELEVATION	SURVEY	(Inches)	(inches)	LAST YEAR	AVERAGE 6
Lost Lake (A)	15B14	6000	1/30	92	28.0	49.1	~
McCann	16C8	4300	1/27	24	6.4	5.8	6.5*
#Medicine Ridge (A)	15B4	6150	1/30	115	35.0	46.4	
Midway	16C12	2200	1/31	T	T	1.3	
Mountain Meadows	15D6	6300	1/26	40	10.3	28.6	
Pierce Rgr. Sta.	15C5	3170	1/27	29	7.5	12.6	9.5*
Shanghai Summit (A)	15C4	4600	1/29	61	18.5	28.0	ten 4m
Sweeney	16C10	4435	1/27	21	5.2	5.9	6.5*
SALMON RIVER							
Big Creek Summit	15 E2	6600	1/30	64	19.4	42.1	22.6*
Borah (A)	13E8	8250	1/27	16	4.2	6.7	
#Boulder Creek	16D1	5500	1/27	52	16.4	29.0	
Brundage Mountain	16D6	7700	1/27	84	26.8	-	
Chapman Creek	16D2	4215	1/28	8	1.7	4.6	3.3*
#Deadwood Summit (A)	15E4	7000	1/28	96	30.6	58.5	34.8*
#Galena Summit	14F12	8795	1/29	43	12.2	32.0	15.1*
#Gibbons Pass Mont.	13D2	7100	1/31	36	9.4	23.8	15.7*
Johns Creek	16D3	3805	1/28	5	0.7	3.4	2.9*
Mill Creek Summit (A)	14E1	8870	1/27	51	14.5	35.2	
Moose Creek	13D16	6200	1/28	26	5.8	17.0	11.4*
Morgan Creek Summit	14E4	7580	1/27	29	6.9	22.6	
Redfish Lake	14E2	6600	1/28	20	4.6		
#Rock Flat Summit	16E1	5200	1/27	38	9.2	19.6	12.6
#Squaw Flat (A)	16 E5	6230	1/28	61	18.5	31.0	
Twin Peaks (A)	14E3	10300	1/27	45	12.8	33.3	
Vienna Mine (A)	14F4	8900	1/28	51	14.5	40.2	
Whitebird Summit	16D5	4390	1/28	15	3.3	7.9	6.0*
Lemhi River							
Above Gilmore (A)	13E19	8200	1/27	22	5.2		
Aspen-Hall Pass	13 E2 1	8110	1/27	24	5.7		
Copes Camp (A)	13E17	7500	1/27	17	4.0		
Gertson Creek (A)	13D17	8050	1/28	10	2.4		
Hall Creek (A)	13E20	7560	1/27	12	2.9		
Meadow Lake (A)	13E18	9100	1/27	38	9.0		
Schwartz Lake (A)	13E16	8500	1/27	40	9.5	19.3	

<sup>(</sup>b) 1948-62, 15 year period. \* Not located directly on this drainage. \* Estimated 1948-62, 15 year Average. (A) Aerial observation: Water content estimated. (SP) Pressure Pillow snow-water equivalent. (R) Radioactive Gage snow-water equivalent.

SOIL MOISTURE	PROFILE (Inches)  SOIL MOISTURE (Inches)						
STATION  NAME ELEVATION			CAPACITY	DATE	THIS YEAR	LAST YEAR	2 YEARS AGO
NAME	ECEVATION						
SPOKANE RIVER							
Fourth of July Summit	3100	48	11.6	2/1	9.8	10.4	10.2
Lookout	5250	48	11.0	1/31	8.0	8.7	7.3
CLEARWATER RIVER	1						
Brown	3100	30	6.7	1/31	4.8	5.8 <sup>j</sup> 10.6 <sup>j</sup>	4.4
Fohl	3450	48	13.3			10.6 <sup>J</sup>	8.3
Midway	2200	36	6.1	1/31	4.9	5.0 <sup>J</sup>	4.9
SALMON RIVER							
Mill Creek Summit	8870	48	8.4	11/1	5.9*	3.9 <sup>n</sup>	6.2 <sup>n</sup>
Lemhi River					+		
Above Gilmore Meadow Lake	8200 9100	60 48	5.4 4.4	11/3 11/3	4.0* 2.8*		2.9 <sup>n</sup> 2.0 <sup>n</sup>
* Fall Measurement n November Measurement j January Measurement							

CURRENT INFORMATION PAST RECORD

DRAINAGE BASIN and SNOW COURSE

DATE OF SNOW DEPTH CONTENT (Inches)

NAME

NO. ELEVATION SURVEY (Inches)

LAST YEAR AVERAGE 6

MIDDLE	SNAKE	RIVER	BASIN	_	NORTHSIDE

LITTLE LOST RIVER							
Fairview Guard Sta. Lost-Garfield Moonshine Sawmill Canyon Wet Creek Summit	13E5 13E3 13E6 13E4 13E7	5850 5700 7250 6000 8175	1/27 1/27 1/28 1/28 1/27	13 10 17 17 22	3.4 3.0 4.5 3.7 6.1	5.4 5.5 16.4 13.0 16.9	3.5* 2.8* 7.5* 6.2* 6.6*
BIG LOST RIVER							
Cherry Creek Pass (A) Copper Basin (A) Iron Bog Leadbelt Lost-Wood Divide (A) North Fork Meadow (A) Slickrock (A) Stickney Mill (A) Twin Rocks (A) White Knob	13 F13 13 F2 13 F11 13 F12 14 F3 14 F15 13 F14 14 F2 13 F15 13 F1	8900 8000 7650 6800 8750 8150 8640 7500 8100 7700	1/28 1/26 1/26 1/26 1/28 1/28 1/28 1/28 1/28 1/28	8 22 36 24 40 29 41 15 41	2.1 6.2 11.2 6.7 10.8 8.6 11.6 4.4 11.6 4.7	4.0 17.3  15.5 30.1 18.5 29.2 12.7  12.8	      4.7*
LITTLE WOOD RIVER	IJFI	7700	1, 23	10	4.7	12.0	4./~
Garfield Rgr. Sta. Muldoon Porcupine (A) Swede Peak (A)	13F4 13F5 14F14 13F9	6554 6300 8350 7500	1/28 1/29 1/28 1/28	27 25 45 47	7.2 6.1 12.8 13.9	17.5 12.4 26.1 26.9	7.0* 5.5*  11.2*
Camas Creeks Div. (A) #Couch Summit (A) Dollarhide Summit (A) Galena Galena Summit Graham Ranch #Lost Wood Divide (A) Mount Baldy Soldier Rgr. Sta.	15F9 14F10 14F8 14F1 14F12 14F5 14F3 14F9 14F11	8620 7500 8795 6200 8750	1/28 1/28 1/28 1/31 1/29 2/1 1/28 1/31 1/31	18 40 43 38 43 33 40 42 28	4.6 10.8 11.7 11.2 12.2 8.6 10.8 11.4 7.2	8.9 19.2 36.3 29.8 32.0 22.2 30.1 31.2 14.6	13.1* 17.6* 12.8* 15.1* 9.2  13.6* 7.9*
CANYON-LONG TOM-CAMAS CF	REEKS						
#Camas Creeks Div. (A) #Danskin (A) Little Camas Flat (A) Long Tom (A) #Willow Creek Cabin (A)	15F10 15F12 15F13	5650 4950 4550	1/28 1/28 1/28 1/28 1/28	18 22 5 1	4.6 5.7 1.3 T T	8.9 16.7 4.7 0.7 2.2	

<sup>(</sup>b) 1948-62, 15 year period. \* Not located directly on this drainage. • Estimated 1948-62, 15 year Average. (A) Aerial observation: Water content estimated. (SP) Pressure Pillow snow-water equivalent. (R) Radioactive Gage snow-water equivalent.

## MIDDLE SNAKE RIVER BASIN NORTHSIDE



## INDEX to SNOW COURSES

NO. S	S T A T I	E NAME	SEC.	TWP.	RGE.	ELEV.	No.	STATE	NAME	SEC.	TWP.	RGE.	ELEV
			LAT.	AND	LONG	•				LAT.	AND	LONG	
N	III	DDLE SNAKE RI	VER	ВА	SIN				BOISE RIVER				
		NORTHSID	E				15F4A	I	Atlanta Summit	29	5N		7500
		110101111011	1.1				15F2M	I	Bad Bear	35	7N		5500
		LITTLE LOST RIVER	)				16F4	I	Bogus Basin	32 36	5 N 5 N		5360
		ETTILE LOST KIVEN					16 F5m 14 F10A	I I	Bogus Basin Road Couch Summit	9	2N	14E	4830
13E5M	I	Fairview Guard Station	27	12N	26E	6750	15F10A	Ţ	Danskin	17	1N		5650
13E3	Ī		3	11N	26E	6600	16 F1	Ī	Deadman Gulch	24	7 N		5600
13E6	I	Moonshine	31	13N	26E	7450	15E9A	Ī	Jackson Peak	7	8N		7000
13E4	I	Sawmill Canyon	17	12N	26E	6900	15F1M	I	Moores Creek Summit	19	7N	7 E	6100
13E7MA	I	Wet Creek Summit	15	8N	25E	8175	15F6	I	Prairie	13	2 N	7 E	4900
							15F3A	I	Road Creek	5	5N		5550
		BIG LOST RIVER					15F5A	I	Trinity Mountain	7	3N		7400
							15F11a	I	Willow Creek Cabin	26	1N	6 E	4710
13F3	I	-	26	5N	21E	8600							
13F13a	I	Cherry Creek Pass	7	5N 6N	23E 21E	8900 8000			CANYON CREEK				
13F2A	I	Copper Basin Iron Bog	24 23	4N	21E	7650	15F7	I	Bennett Mountain	7	2 S	OF	6650
13F11 13F12	T	0	34	4N	23E	6800	15F8	Ţ	Dixie Hill	13	2 S	8E	
13F12 14F3A	I	Lost Wood Divide	19	6 N	19E	8750	15F12a	I	Little Camas Flat	21	1S		4950
14F15a	I		20	7 N	18E	8150	15F12a		Long Tom	19	15		4550
13F14.	Ī		17	4N	22E	8640	151154		Long Lom		20	02	4550
14F2A	Ī		9	6 N	19E	7500			PAYETTE RIVER				
13F15a	Ī		22	4N	22E	8100			I A I L I I L KI V L K				
13F1	I	White Knob	2.5	7N	23E	7700	16 F2M	I	Bogus Basin	16	5N	3 E	6120
							15E8	I	Cozy Cove	19	11N	7 E	5900
		BIG WOOD RIVER					15E3	I	Crawford Ranger Station		14N		4800
							15E10	I	Deadwood Airstrip	8	1.1N		5440
15F9a	I		11	2.5	9E	5720	15E7	I	Deadwood Dam	8	11N	7 E	5290
14F8A	I		16	3N	15E	8620	15E4A	I	Deadwood Summit	23	14N		7000
14F1M	I		3	6N	15 E	7300	16E7a	I	Greenfield Flat	1	13N		7370
14F12M	I		33	7N 5N	15E	8795 6200	16E4	I	High Valley Summit	9 <b>3</b>	10N 18N		5170 6000
14F5	I		10 8	4N	17E 20E	7900	15E1 16E1	I	Lake Fork Rock Flat <b>S</b> ummit	1	18N		5200
14F7	I		8 26	4N	17E	9000	15E5A	I I	Silver Creek Ridge	24	12N		5700
14F9 14F <b>11</b>	I	•	19	2N	14E	6100	15D2A	I	Squaw Meadow	5	21N	4E	5800
14111		boluler ranger seation	17		1-1-2	0 100	16 E3	I	Tripod Summit	17	11N		5200
		LITTLE WOOD RIVE	R										
13F4M	I	Garfield Ranger Station	11	3N	21E	6554			WEISER RIVER				
13F5	Ī	2	25	3N	21E	6300	16D1	I	Boulder Creek	15	20N	1W	5500
14F13m	ī		26	2 N	20 E	5450	16E6a	ī	Mica Ridge	15	15N	2 E	6800
14F14a	Ī		30	4N	20E	8350	16E2	Ī	Placer Creek	15 & 16	17N	3W	6000
13F9A	I	Swede Peak	4	3N	21E	7500	16 E5a	I	Squaw Flat	32	17N	2 E	62 <b>3</b> 0
		FISH CREEK											
13F10	I	Iron Mine Creek	32	3 N	23E	6370							
13F6	I		12	2 N		6000							

#### LEGEND

#### Numbering System (example)

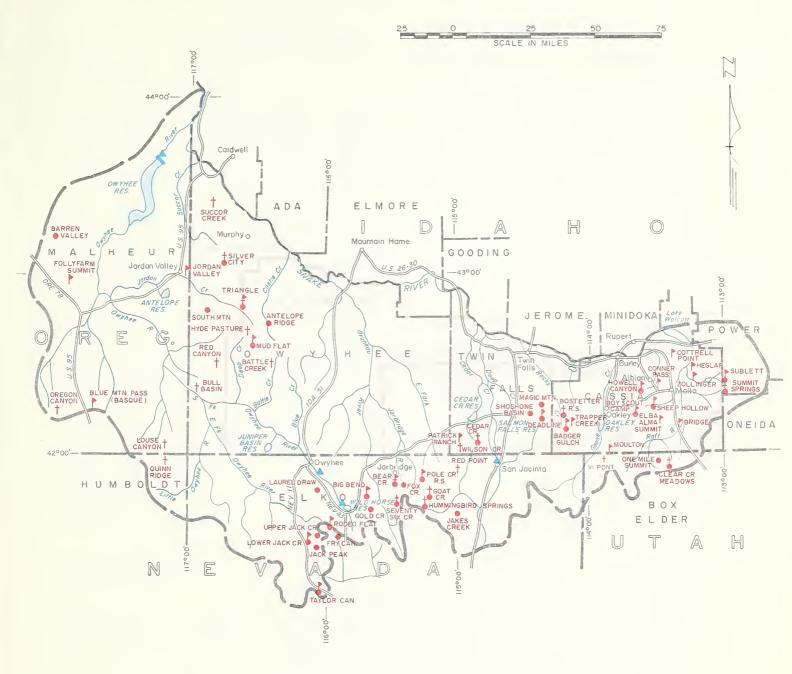
1017	SNOW COURSE ONLY.
10J7P	SNOW COURSE AND PRECIPITATION GAGE.
10J7M	SNOW COURSE AND SOIL MOISTURE STATION.
10J7A	SNOW COURSE AND AERIAL MARKER.
10J7MA	SNOW COURSE, SOIL MOISTURE STATION AND AERIAL MARKER.
10J7MP	SNOW COURSE, SOIL MOISTURE STATION AND PRECIPITATION GAGE.
10J7 m	SOIL MOISTURE STATION ONLY.
10J7 a	AERIAL MARKER ONLY.
10J7 p	STORAGE PRECIPITATION GAGE ONLY.

SNOW				RRENT INFORM			RECORD
DRAINAGE BASIN and SNOW	COURSE NO.	ELEVATION	DATE OF SURVEY	SNOW DEPTH (Inches)	WATER CONTENT (Inches)	WATER CON'	TENT (Inches)
					( menes)		
BOISE RIVER							
Atlanta Summit (A)	15F4	7500	1/28	70	21.5	50.1	20.99
Bad Bear	15F2	5500	1/31	33	8.5	19.9	
Bogus Basin	16F2	6120	2/1	36	10.4	28.2	15.1
Bogus Basin Road	16 F4	5360	2/1	11	3.1	8.6	2.5
Camas Creeks Div. (A)	15F9	5720	1/28	18	4.6	8.9	***
Couch Summit (A)	14F10	6950	1/28	40	10.8	19.2	13.1
Danskin (A)	15F10	5650	1/28	22	5.7	16.7	
Dollarhide Summit (A)	14F8	8620	1/28	43	11.7	36.3	17.6
Jackson Peak (A)	15E9	7000	1/28	65	20.0	40.7	20.5
Little Camas Flat (A)	15F12	4950	1/28	5	1.3	4.7	
Long Tom (A)	15F13	4550	1/28	1	T	0.7	
Moores Creek Summit	15F1	6100	1/31	58	17.8	38.3	20.9
Prairie	15F6	5600	1/29	12	2.0	12.1	4.6
Road Creek (A)	15F3	6800	1/28	27	7.0	13.0	7.8
Soldier Rgr. Sta.	14F11	6100	1/31	28	7.2	14.6	7.9
<pre>Irinity Mountain (A) Irinity Mountain (SP)</pre>	15 F5 15 F5	7400 7400	1/28 2/1	81	25.8 25.2	53.9	29.1
lienna Mine (A)	14F4	8900	1/28	51	14.5	40.2	
Willow Creek Cabin (A)	15F11	4710	1/28	1	14.5 T	2.2	
PAYETTE RIVER		1,20	2, 20	-	•	2.2	
FAILILE RIVER							
Big Creek Summit	15E2	6600	1/30	64	19.4	42.1	23.99
Bogus Basin	16F2	6120	2/1	36	10.4	28.2	15.1
Brundage Mountain	16D6	7700	1/27	84	26.8		
Cozy Cove	15E8	5900	1/27	38	11.1	19.0	11.0
Crawford Rgr. Sta.	15E3	4800	1/31	22	6.5	10.2	5.5
Deadwood Airstrip	15E10	5440	1/28	39	11.8	18.2	9.64
Deadwood Dam	15E7	5500	1/27	40	11.8	21.1	11.7
Deadwood Summit (A)	15E4	7000	1/28	96	30.6	<b>5</b> 8.5	34.8
Greenfield Flat (A)	16 E7	7370	1/28	65	19.7	50.5	
High Valley Summit	16E4	5170	2/1	24	5.9	14.4	00 54
Jackson Peak (A)	15E9	7000	1/28	65	20.0	40.7	20.5
lake Fork	15E1	6000	1/27	35	8.2	20.7	
<sup>t</sup> Mica Ridge (A) Rock Flat Summit	16E6 16E1	6800 <b>52</b> 00	1/28	69	20.9	39.7	10 6
Silver Creek Ridge (A)	15E5	5700	1/27 1/28	38 42	9.2	19.6 20.8	12.6
Squaw Flat (A)	16E5	6230	1/28	61	12.4 18.5		
Tripod Summit	16E3	5200	2/1	36	9.1	31.0 21.0	
VEISER RIVER			, <del>-</del>		, , ,		
Boulder Creek	16D1	5500	1/27	52	16.4	29.0	
lica Ridge (A)	16 E6	6800	1/28	69	20.9	39.7	
Squaw Flat (A)	16E5	6230	1/28	61	18.5	31.0	

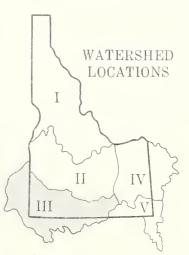
<sup>(</sup>b) 1948-62, 15 year period. \*Not located directly on this drainage. \*Estimated 1948-62, 15 year Average. (A) Aerial observation: Water content estimated. (SP) Pressure Pillow snow-water equivalent. (R) Radioactive Gage snow-water equivalent.

SOIL MOISTURE		PROFILE	(Inches)		SOIL MOISTURE (Inches				
STATION NAME	ELEVATION	DEPTH	CAPACITY	DATE	THIS YEAR	LAST YEAR	2 YEARS AGO		
LITTLE WOOD RIVER									
Garfield R. S.	6554	36	5.2	1/28	2.8	3.8	3.8		
BIG WOOD RIVER									
Galena Galena Summit	7300 8795	48 48	10.1 5.8	1/31 1/29	6.4 2.0	00 to	7.8 1.5		
BOISE RIVER									
Bad Bear Bogus Basin Road Moores Creek Summit	5500 4830 6100	66 48 60	6.3 7.1 8.8	1/31 2/1 1/31	4.9 4.6 7.5	5.5 6.0 9.2	5.3 5.3 7.5		
j January Measurement									
		,							
		*							

# MIDDLE SNAKE RIVER BASIN SOUTHSIDE







## INDEX to SNOW COURSES

NO.	STAT	E NAME	SEC.		RGE.	ELEV.		NO.	STAT	NAME	SEC.		RGE.	ELEV.
			LAT.	OR -	LONG.						LAT.	AND	LONG	
M		DLE SNAKE RIV		BAS	SIN					BRUNEAU RIVER				
		SOUTHSIDE					-	15H1MA	N	Bear Creek	31	46 N	58E	7800
		1700111012	-					15H2	N	Fox Creek	33	46N	58E	6800
		RAFT RIVER					İ	15H15A	N	Hummingbird Spring	s 6		60E	8945
								15H14M	N	Pole Creek Ranger	Station 13	46N	59E	8330
13G2A	I	Boy Scout Camp	12	14 S	23E	7600								
13G11m	I	Bridge	7	15S	27E	4750	1			OWYHEE RIVER				
13H2A	U	Clear Creek Meadows	26	14N	14W	9050								
13G6m	I	Conner Pass	35	125	25 E	5700		16G6	I	Antelope Ridge	20	8 <b>S</b>	1 E	5900
13G7m	I	Cottrell Point	24	10 S	25E	4490	1	18F5	0	Barren Valley	26	27S	38E	4200
13G10m	Ι		29	148	25E	5690		16G9a	I	Battle Creek	10	118	1E	5700
13G8m	I	9	19	115	28E	4590		15H4M	N	Big Bend	30	45N	56 E	6700
13G1M	I		2 27	13S 16S	24E	8000	Ì	17G2m	0	Blue Mountain Pass		38S	42E	5290
13G12m	I	Moulton One Mile Summit	19	165 14N	23E 14₩	5950 7330		16G10a 18G3m	I	Bull Basin	29	12S 30S	6W 38E	5600 4450
13H1	U	Sheep Hollow	4	14N 14S	24E	6200	1	15H7	O N	Folly Farm Summit	8	43N	54E	6700
13G5M 13G3M	I		8	12S	30 E	6000		15H7 15H5	N N	Fry Canyon Gold Creek	31 31	45N 45N	56 E	6600
13G4A	I	Summit Springs	15	135	30E	8500		16G5a	I	Hyde Pasture	SE½ 31	45N 8S	2W	5800
13G4A 13G9m	I	Zollinger	2	135	28E	5000		16H4	N	Jacks Peak	28	42N	53E	8420
1369111	Τ.	Zoffinger	_	155	201	3000		17G3m	0	Jordan Valley	2	30S	46E	4390
			F 1/2					16H5	N	Laurel Draw	20	45N	53E	6700
		GOOSE - TRAPPER CRE	ΕK					17G4a	0	Louse Canyon	27	40S	44E	6440
	_	- 1 011	0.4	150	100	((()		16H1M	N	Lower Jack Creek	18	42N	53E	6800
14G3M		Badger Gulch	24	15 S	19E	6660 7500		16G7M	I	Mud Flat	34	98	2W	5500
14G1A	I	Bostetter Ranger Station	35 2	14S 15S	19E 20E	5300		17G5a	0	Oregon Canyon	9	40 S	40E	6950
14G7m 13H3a	I	Trapper Creek Vi Pont	∠ 17	14N	17W	7670		17H6a	N	Quinn Ridge	9	47N	41E	6300
1.3H3a	U	VI PONC	17	1414	1/W	7070		16G11a	I	Red Canyon	32	118	4W	6650
								15H6M	N	Rodeo Flat	36	43N	53E	6800
		SALMON FALLS CREEK	<					16F3A	I	Silver City	6	5 S	37	6400
								16G1	I	South Mountain	35	7S	5₩	6340
14G5A	I		25	15S	13E	7000		16F6a	I	Succor Creek	25	38	5W	6100
14G4M	I		25	14S	18E	6900		15H9M	N	Taylor Canyon	35	39N	53E	6200
15H13A	N	Goat Creek	31	46 N	60E	8800		16G4MA	I	Triangle	$N_{2}^{1}$ 25	7S	3W	5150
14H1	N	Jakes Creek	6	42 N	62E	7000		16H2	N	Upper Jack Creek	9	42N	53E	7250
14G2	Ι	8	14	145	18E	6700								
15G1m	I		23	158	12 E	5720								
15H18a	N	Red Point	15	47N	61E	7940								
14G6	I	Shoshone Basin	24	145	17E	5740								
15G2a	I	Wilson Creek	24	16 S	12E	7500	1							

#### LEGEND

### Numbering System (example)

1037	SNOW COURSE ONLY.
10J7P	SNOW COURSE AND PRECIPITATION GAGE.
10J7M	SNOW COURSE AND SOIL MOISTURE STATION.
10J7A	SNOW COURSE AND AERIAL MARKER.
10J7M	SNOW COURSE, SOIL MOISTURE STATION AND AERIAL MARKER.
10J7MP	SNOW COURSE, SOIL MOISTURE STATION AND PRECIPITATION GAGE.
10J7 m	SOIL MOISTURE STATION ONLY.
10J7 a	AERIAL MARKER ONLY.
10J7 p	STORAGE PRECIPITATION GAGE ONLY.

SNOW		_	RENT INFOR		PAST R	ECORD	
DRAINAGE BASIN and SNOW	COURSE			SNOW DEPTH	WATER	WATER CONT	ENT (Inches)
NAME	NO.	ELEVATION	SURVEY	(Inches)	CONTENT (inches)	LAST YEAR	AVERAGE 1

### MIDDLE SNAKE RIVER BASIN - SOUTHSIDE

RAFT RIVER							
Boy Scout Camp (A) Clear Creek Meadows (A) Howell Canyon Sublett Summit Springs (A)	13G2 13H2 13G1 13G3 13G4	7600 9050 8000 6000 8500	1/26 1/26 1/28 1/26 1/26	34 67 41 28 29	8.9 17.5 10.7 6.3 6.4	26.1 26.9 31.0  9.2	  16.8* 
GOOSE CREEK							
Badger Gulch Bostetter Rgr. Sta.(A) Vi Pont (A)	14G3 14G1 13H3	6660 7500 7670	1/25 1/26 1/26	24 37 35	5.3 9.7 9.3	11.0 22.7 16.5	 10.9* 
SALMON FALLS CREEK							
#Bear Creek (A) Cedar Creek (A) Deadline Goat Creek (A) #Hummingbird Springs (A) Magic Mountain #Pole Creek R. S. Red Point (A) Shoshone Basin Wilson Creek (A)	15H1 14G5 14G4 15H13 )15H15 14G2 15H14 15H18 14G6 15G2	7800 7000 6900 8800 8945 6700 8330 7940 5740 7500	1/26 1/29 1/26 1/26 1/25 1/28 1/26 1/31 1/26	37 13 36 25 36 38 31 13 9 21	9.8 3.0 8.2 4.1 9.5 6.2 8.2 3.4 1.6 5.6	21.1 8.4 25.6 14.2 27.3 20.0 16.4 6.9 2.6 12.3	11.7* 6.8* 14.5* 10.0* 10.7* 11.8* 10.5* 3.9*
BRUNEAU RIVER							
Bear Creek(A) Hummingbird Springs(A) Pole Creek Rgr. Sta. #Seventy-six Creek (A)	15H1 15H15 15H14 15H3		1/26 1/26 1/28 1/27		9.8 9.5 8.2 4.7		11.7* 10.7* 10.5* 7.4*
OWYHEE RIVER							
Battle Creek (A)  #Bear Creek (A)  Bull Basin (A)  Hyde Pasture (A)  Mud Flat  Red Canyon (A)  #Seventy-six Creek (A)  Silver City  South Mountain  Succor Creek (A)  Triangle (A)	16G9 15H1 16G10 16G5 16G7 16G11 15 H3 16F3 16G1 16F6 16G4	5700 7800 5600 5800 5500 6650 7100 6400 6340 6100 5150	1/27 1/26 1/27 1/27 1/31 1/27 1/27 1/29 1/28 1/27 1/27	7 37 2 12 14 14 21 27 15 13	1.3 9.8 0.4 2.3 2.6 3.4 4.7 6.2 3.7 3.1	2.4 21.1 0.0 4.8 4.6 6.0 8.1 18.4 12.4 6.0 0.8	11.7* 7.4* 9.7* 7.4

<sup>(</sup>b) 1948-62, 15 year period. \*Not located directly on this drainage. \*Estimated 1948-62, 15 year Average. (A) Aerial observation: Water content estimated. (SP) Pressure Pillow Snow-water equivalent. (R) Radioactive Gage snow-water equivalent.

CURRENT INFORMATION

PAST RECORD

DRAINAGE BASIN and SNOW COURSE

DATE OF SNOW DEPTH CONTENT (Inches)

NAME

NO. ELEVATION SURVEY (Inches)

LAST YEAR AVERAGE 6

OWYHEE RIVER (Cont'd)

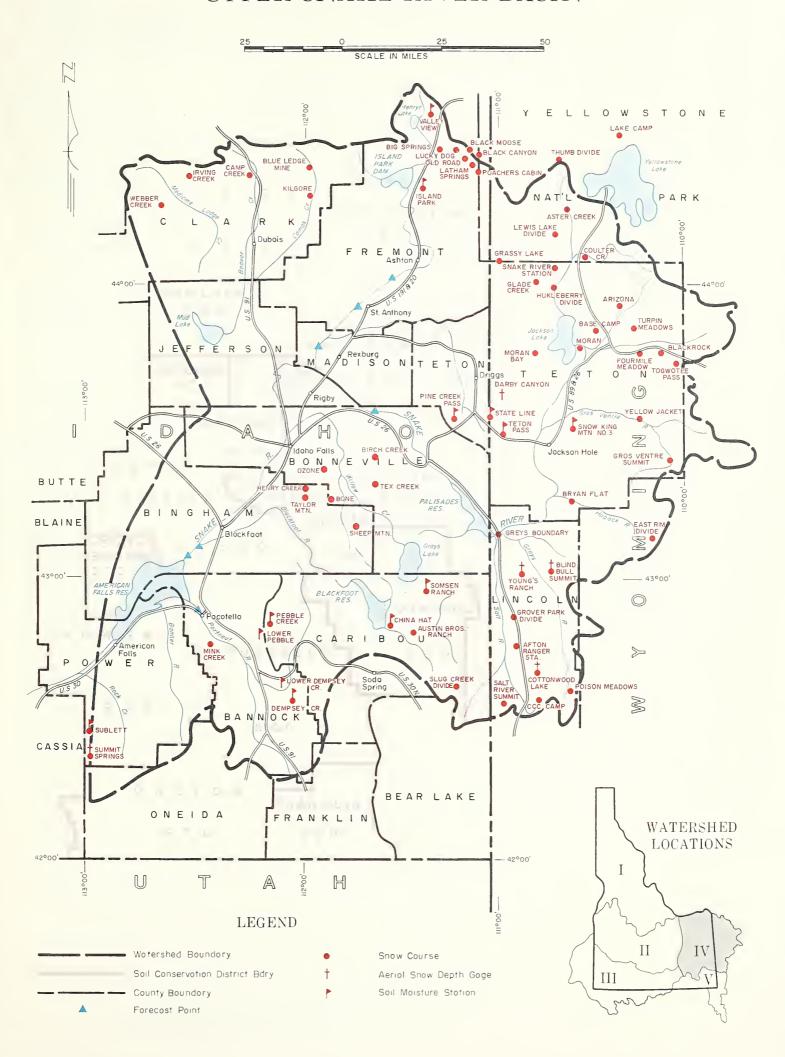
8

Vaught Ranch (A) 16G12 5950 1/27 6 1.1 -- -- War Eagle (A) 16G13 7700 1/27 45 10.8 -- --

SOIL MOISTURE	PROFILE	(Inches)	SOIL MOISTURE (Inches)					
STATION	ELEVATION	DEPTH	CAPACITY	DATE	THIS YEAR	LAST YEAR	2 YEARS AGO	
RAFT RIVER								
Conner Pass Howell Canyon Sheep Hollow Sublett	5700 8000 6200 6000	36 48 36 36	9.8 11.5 7.5 7.0	1/28 1/28 11/1 1/26	8.8 8.4 3.6* 6.6	10.2 5.3 7.0 <sup>m</sup> 7.8 <sup>m</sup>	7.2 4.4 6.4 6.9	
GOOSE CREEK								
Badger Gulch Trapper Creek	6660 5300	36 36	7.0 10.0	12/30 1/25	5.4 <sup>j</sup> 5.4	7.0 8.5	6.9 5.1	
SALMON FALLS CREEK	:							
Deadline Patrick Ranch Pole Creek R. S.	6900 5720 8330	36 36 48	7.4 7.7 12.7	1/29 1/28 11/5	5.7 4.6 10.2*	6.9  8.6	3.9 <sup>j</sup>	
BRUNEAU RIVER								
Bear Creek	7800	72	16.9	11/5	10.5*	13.7 <sup>m</sup>	9.9 <sup>tt</sup>	
OWYHEE RIVER								
Mud Flat Triangle	5500 5150	48 48	12.8 16.2	1/31 11/16	10.7 14.4*	13.4 16.4 <sup>m</sup>	10.7	
* Fall Measurement j January Measurement m March Measurement								

<sup>(</sup>b) 1948-62, 15 year period. \* Not located directly on this drainage. \* Estimated 1948-62, 15 year Average. (A) Aerial observation: Water content estimated. (SP) Pressure Pillow snow-water equivalent. (R) Radioactive Gage snow-water equivalent.

## UPPER SNAKE RIVER BASIN



## INDEX to SNOW COURSES

NO.	STAT	E NAME	SEC. TWP. RGE	_	NO.	STATE	NAME	SEC.	TWP.	RGE.	ELEV.
Ţ	JPF	ER SNAKE RIV	VER BASII	1			TETON RIVER				
					10F2la	Wy	Darby Canyon	28	43N	118W	8250
		SNAKE RIVER - WY	OMING		11F2M	ľ	Pine Creek Pass	24	3N	44E	6750
					11F1M	I	State Line	32	3 N	46E	6400
10G4	Wy	Afton Ranger Station	30 32N 118		1.0F13M	Wy	Teton Pass	24	41N	1187	8500
10F1	Wy	Arizona	3 46N 115			-					
10E8	Wy	Aster Creek		<sup>2</sup> 38 ' 7700			CAMAS - BEAVER	CREEK			
10F2	Wy	Base Camp	20 46N 113					• =			
10F7	Wy	Blackrock	4 44N 111		11E11	I	Blue Ledge Mine	27	13N	38E	6700
10G2A	Wy	Blind Bull	6 34N 115		12E3	1	Camp Creek	21	13N	36E	6800
10F14	Wy	Bryan Flat	9 38N 115 44 <sup>0</sup> 44' 110		11E12	I	Kilgore	6	12N	39E	6200
10E3	Wy	Canyon		°30' 7750							
10G7	Wy	CCC Camp	9 29N 118 25 31N 118				MEDICINE LODGE	CREE	K		
10G5A 10E10	Wy Wy	Cottonwood Lake Coulter Creek		W 7500 <sup>0</sup> 33' 7600							
10E10	,	East Rim Divide	32 37N 111		12 E4	1	Irving Creek	3	13N	33E	7035
10F17 10F6	Wy Wy	Four Mile Meadows	35 45N 112		12E5	1	Webber Creek	23	1.2 N	32E	6700
10E13	Wy	Glade Creek	12 48N 116								
10E13	wy Wy	Greys Boundary	33 37N 118				WILLOW CREEK				
10F19	Wy	Gros Ventre Summit	36 40N 111					0.6	0.17	/ 1 5	6000
10G3	Wy	Grover Park Divide	27 33N 118		11F3	1	Birch Creek	36	2 N	41E	6300
10E14	Wy	Huckleberry Divide	32 43N 115		11F8	Ι	Bone	29	15	40 E	6200
10E4	Wy	Lake Camp		°24' 7850	11F4	1	Czone	14	1N	39E	5800
10E9	Wy	Lewis Lake Divide		°40' 7900	11F9	1	Sheep Mountain	32	25	41E	6300
10F4	Wy	Moran	δ ω 17 45N 114		11F5	1	Tex Creek	6	18	42 E	6700
10F3	Wy	Moran Bay	14 45N 116								
10 E2	Wy	Norris Basin		°42' 7500			SAND CREEK				
10G6	Wy	Poison Meadows	29 30N 116		11776		II O	7	18	39E	5650
10G8	Wy	Salt River Summit	32 29N 118		11F6	I	Henry Creek	19	15	39E	6500
10E12	Wy	Snake River Station	9 48N 115		11F7	1	Taylor Mountain	19	13	335	0,000
10F20	Wy	Snow King Mountain #3	4 40N 117								
10E5	Wy	Sylvan Pass	12 52N 110	W 7100			BLACKFOOT RIVE	K			
10E7	Wy	Thumb Divide	44 <sup>0</sup> 22' 110	°35' 7900	11G3	Ι	Austin Brothers Ranch	28	73	43E	6450
10F9	Пy	Togwotee Pass	29 44N 110	₹ 9600	11G3 11G2M	I	China Hat	17	7 S	43E	6300
10F5	Wy	Turpin Meadows	14 45N 112	W 6930	11G5	I	Slug Creek Divide	15	10 S	44E	7225
10G1A	Wy	Young's Ranch	26 34N 116	T 6530	11G1M	Ī	Somsen Ranch	25	5S	43E	7000
	-				110111	-	Joinson, Marion	23	50		, 000
		HENRYS FORK RIVE	R				PORTNEUF RIVER				
11E9	1	Big Springs	34 14N 44		12G5M	I	Dempsey Creek	17	105	38E	6230
11E18	I	Black Canyon	11 13N 45		12G7m	ī	Lower Dempsey	5	105	38E	5210
11E19	1	Black Moose	33 14N 45		12G6m	ī	Lower Pebble	7	88	38E	5800
10E15	Иy	Grassy Lake	6 48N 117		12G1	ī	Mink Creek	33	7 S	34E	6300
11E10M	1	Island Park	29 13N 43		12G2M	ī	Pebble Creek	34	7 S	37E	6550
11E16	I	Latham Springs	9 1.3N 45		1202.1	_			, 3	J	
11E14	I	Lucky Dog	2 13N 45								
11E15	1	Old Road	12 13N 44								
11E17	1	Poacher's Cabin	11 13N 45								
11E8M	I	Valley View	7 15N 44	E 6500	1						

#### LEGEND

#### Numbering System (example)

10 <b>J7</b> S	NOW COURSE ONLY.
10J7P S	NOW COURSE AND PRECIPITATION GAGE.
10J7M S	NOW COURSE AND SOIL MOISTURE STATION.
10J7A S	NOW COURSE AND AERIAL MARKER.
10J7MA S	NOW COURSE, SOIL MOISTURE STATION AND AERIAL MARKER.
10J <b>7M</b> P S	NOW COURSE, SOIL MOISTURE STATION AND PRECIPITATION GAGE.
10J7 m S	OIL MDISTURE STATION ONLY.
10J7 a A	ERIAL MARKER ONLY.
10J7 p S	TORAGE PRECIPITATION GAGE ONLY.

SNOW			CUF	RENT INFOR	MATION	PAST R	ECORD
DRAINAGE BASIN and SNOW	DATE OF	SNOW DEPTH	WATER	WATER CONTENT (Inches)			
NAME	NO,	ELEVATION	SURVEY	(Inches)	CONTENT (Inches)	LAST YEAR	AVERAGE 1

	UPPI	ER SNAK	E RIVER	RBASIN			
CAMAS-BEAVER CREEKS							
Camp Creek Kilgore	12E3 11E12	6800 6200	1/28 1/28	24 25	5.6 5.8	13.3 10.6	6.5 6.4
MEDICINE LODGE CREEK							
Irving Creek Webber Creek	12E4 12E5	7035 6700	1/28 1/27	16 16	3.2 2.4	7.6 7.7	
HENRY'S FORK RIVER							
Big Springs Black Canyon Black Moose Grassy Lake Island Park Latham Springs Lucky Dog Old Road Poacher's Cabin Valley View	11E9 11E18 11E19 10E15 11E10 11E16 11E14 11E15 11E17 11E8	6500 7850 8125 7230 6315 7650 6900 7250 8000 6500	1/28 1/27 1/27 1/28 1/28 1/27 1/27 1/27 1/27 1/28	41 68 75 65 36 63 49 50 64 34	10.5 20.4 23.6 19.1 8.4 18.6 11.8 14.0 19.4 8.4	22.2  32.8 19.4   23.5	13.7  22.3* 10.8   9.6
TETON RIVER							
Darby Canyon (A) Pine Creek Pass State Line Teton Pass	10F21 11F2 11F1 10F13	8250 6750 6400 8500	1/28 1/28 1/28 1/28	36 32 25 46	9.0 8.0 6.4 13.5	16.3 15.8 13.0 28.7	9.8 22.4
WILLOW CREEK							
Aspen Grove Birch Creek Bone Ozone Sheep Mountain II Tex Creek	11F10 11F3 11F8 11F4 11F9 11F5	6600 6800 6200 5800 6600 6700	2/2 2/2 2/3 2/3 2/3 1/26	30 26 21 13 29 23	6.0 5.0 4.9 1.7 7.2 4.0	12.2 9.1 1.8  10.9	
SAND CREEK							
Henry Creek Taylor Mountain	11F6 11F7	5650 6500	1/28 1/28	17 20	4.3 4.2	3.1 8.2	
BLACKFOOT RIVER							
Austin Bros. Ranch China Hat	11G3 11G2	6450 6300	1/25 1/25	22 23	5.0 4.8	8.3 5.4	5.2* 4.9*

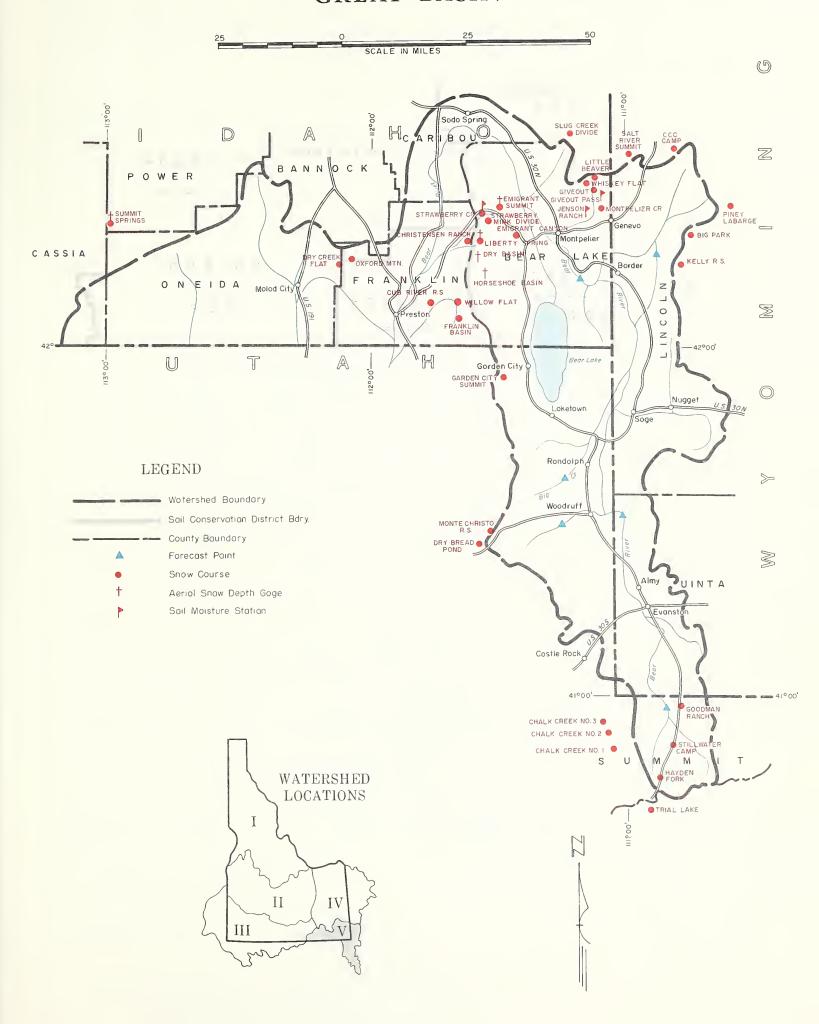
<sup>(</sup>b) 1948-62, 15 year period. \*Not located directly on this drainage. \*Estimated 1948-62, 15 year Average. (A) Aerial observation: Water content estimated. (SP) Pressure Pillow Snow-water equivalent. (R) Radioactive Gage snow-water equivalent.

SNOW	CU	RRENT INFOR	PAST RECORD				
DRAINAGE BASIN and SNOW COURSE  NAME NO. ELEVATION		ELEVATION	DATE OF SURVEY	SNOW DEPTH (Inches)	WATER CONTENT (Inches)	WATER CONT	ENT (Inches)  AVERAGE 6
BLACKFOOT RIVER (Cont'd	)						
Slug Creek Divide Somsen Ranch	11G5 11G1	7225 7000	1/27 1/26	34 32	8.7 7.3	19.2 14.3	 7.8*
PORTNEUF RIVER							
Dempsey Creek Lower Pebble Pebble Creek	12G5 12G6 12G2	6280 5800 6550	2/4 2/5 2/5	27 28 31	5.6 6.9 7.8	10.0	7.2*  9.2*

ELEVATION	DEPTH	CAPACITY	DATE	THIS	LAST	2 YEARS
			1	YEAR	YEAR	AGO
6315 6500	48 48	9.9 13.3	1/28 1/28	8.8	11.1 12.6	8.4 8.1
6750 6400 8500	48 48 48	13.3 14.8 10.5	1/28 1/28 1/28	5.7 12.5 10.0	6.9 13.0 7.2	9.2 12.7 10.4
5800 6550	36 48	7.6 7.2	2/5 2/5	7.7 6.0	6.6 3.2	7.9 5.7
-1						-
	6500 6750 6400 8500	6500 48 6750 48 6400 48 8500 48	6500 48 13.3 6750 48 13.3 6400 48 14.8 8500 48 10.5	6500 48 13.3 1/28 6750 48 13.3 1/28 6400 48 14.8 1/28 8500 48 10.5 1/28 5800 36 7.6 2/5	6500 48 13.3 1/28 8.0 6750 48 13.3 1/28 5.7 6400 48 14.8 1/28 12.5 8500 36 7.6 2/5 7.7	6500       48       13.3       1/28       8.0       12.6         6750       48       13.3       1/28       5.7       6.9         6400       48       14.8       1/28       12.5       13.0         8500       48       10.5       1/28       10.0       7.2

<sup>(</sup>b) 1948-62, 15 year period. \*Not located directly on this drainage. \*Estimated 1948-62, 15 year Average. (A) Aerial observation: Water content estimated. (SP) Pressure Pillow snow-water equivalent. (R) Radioactive Gage snow-water equivalent.

## GREAT BASIN



## INDEX to SNOW COURSES

NO.	STATE	NAME	SEC.	TWP	RGE.	ELEV.
				OR		
			IΔT	ANO	LONG	

## GREAT BASIN

RF	Α.	D	D	I١	/ [	- D

10G11	Wy	Big Park	7	27N	117W	8700
11H13MP	บ	Dry Bread Pond	19	8 N	4E	8230
11G7	1	Emigration Canyon (mouth)	24	12S	42E	6500
11H7P	U	Garden City Summit	35	14N	4E	7600
10J6	U	Goodman Ranch	19	3 N	10E	7900
10J7	U	Hayden Fork	1	18	9E	9300
10G12	Wy	Kelly Ranger Station	13	26N	118W	8200
11H12P	บ้	Monte Cristo R. S.	3	8 N	4E	8960
10G10	Wy	Piney LaBarge	19	29N	114W	8820
10J17P	U	Stillwater Camp	32	2 N	10 E	8550
		MONTPELIER CREEK				
11G16	I	Giveout	35	118	45E	6840
11G17m	1	Giveout Pass	2	12\$	45E	7025
11G19m	1	Jenson Ranch	15	12S	45E	6580
11G20	1	Little Beaver	26	118	45E	6970
11G18	I	Montpelier Creek	22	12S	45E	6570
11G21	1	Whiskey Flat	26	118	45E	6985
		MINK CREEK				
11G11	I	Christensen Ranch	27	138	41E	5600
11G14a	1	Dry Basin	30	138	42E	7900
11G6M	1	Emigrant Summit	21	12S	42E	7350
11G15a	1	Horseshoe Basin	31	13 S	42E	8000
11G13A	1	Liberty Spring	7	138	42E	8600
11G9M	1	Strawberry Creek	9	138	41E	5800
11G10	1	Strawberry Mink Divide	14	13\$	41E	6800
		CUB RIVER				
11G12	1	Cub River Ranger Station	5	15 S	41E	5400
11G8	1	Franklin Basin	1	16S	41E	8000
11G4P	I	Willow Flat	2	15S	41E	6100
		MALAD RIVER				
12G4	I	Dry Creek Flat	31	138	37E	6350
12G3	I	Oxford Mountain	32	13S	37E	6800

#### LEGEND

#### Numbering System (example)

1037	SNOW COURSE ONLY.
10J7P	SNOW COURSE AND PRECIPITATION GAGE.
10J7M	SNOW COURSE AND SOIL MOISTURE STATION.
10J7A	SNOW COURSE AND AERIAL MARKER.
10J7MA	SNOW COURSE SOIL MOISTURE STATION AND AERIAL MARKER.
10J7MP	SNOW COURSE, SOIL MOISTURE STATION AND PRECIPITATION GAGE.
10J7 m	SOIL MOISTURE STATION ONLY.
10J7 a	AERIAL MARKER ONLY.
10J7 p	STORAGE PRECIPITATION GAGE ONLY.

CURRENT INFORMATION PAST RECORD

DRAINAGE BASIN and SNOW COURSE

NAME

DATE OF SNOW DEPTH CONTENT (Inches)

SURVEY

Onches

LAST YEAR AVERAGE B

GREAT	BASIN

BEAR RIVER							
Emigrant Summit Emigration Canyon	11G6 11G7	7350 6500	1/28 1/28	45 23	11.4 5.5	29.4 11.0	
Montpelier Creek							
Giveout Little Beaver Montpelier Creek Whiskey Flat	11G16 11G20 11G18 11G21	6840 6970 6570 6985	1/27 1/27 1/27 1/27	29 34 23 25	6.4 8.2 5.1 6.3	14.8 17.7 10.8 13.1	
Mink Creek							
Christensen Ranch Dry Basin (A) #Emigrant Summit Horseshoe Basin (A) Liberty Spring (A) Strawberry Creek Strawberry Mink Divide	11G11 11G14 11G6 11G15 11G13 11G9 11G10	5600 7900 7350 8000 8600 5800 6800	1/28 1/29 1/28 1/29 1/29 1/28 2/4	22 72 45 48 73 22 37	5.1 18.2 11.4 12.1 18.5 5.0 9.2	7.5 37.8 29.4 30.9 46.8 11.2 24.4	6.4*    7.7* 13.5*
Cub River							
Cub River R. S. Willow Flat	11G12 11G4	5400 6100	1/31 2/1	23 34	5.0 7.8	6.6 15.4	6.5* 9.7*
MALAD RIVER							
Dry Creek Flat Oxford Mountain	12G4 12G3	6350 6800	1/31 1/31	17 21	4.0 4.4	8.0 12.0	4.7* 6.2*

SOIL MOISTURE	PROFILE (Inches) SOIL MOISTURE (Inches)						
STATION		DEPTH	TH CAPACITY	DATE	THIS	LAST	2 YEARS
NAME	ELEVATION				YEAR	YEAR	AGO
BEAR RIVER							
Emigrant Summit Strawberry Creek	7350 5800	36 48	8.2	1/28 1/28	5.2 6.0	4.1	5.7 8.0
Montpelier Creek							
Giveout Pass Jenson Ranch	7025 6580	48 48	12.6 18.7	1/27 1/27	8.4	 17.8	10.6

<sup>(</sup>b) 1948-62, 15 year period. \* Not located directly on this drainage. \* Estimated 1948-62, 15 year Average. (A) Aerial observation: Water content estimated. (SP) Pressure Pillow snow-water equivalent. (R) Radioactive Gage snow-water equivalent.



# Agencies and Organizations Cooperating in Idaho Snow Surveys

#### GOVERNMENT AGENCIES

Canada:

Department of Lands, Forests, and
Water Resources, British Columbia
Department of Resources and Development,
Water Resources Division

#### States:

Idaho State Reclamation Engineer
State of Idaho Department of Fish and Game
University of Idaho
Idaho State University
Montana Agricultural Experiment Station
Montana State Water Conservation Board
Nevada Cooperative Snow Surveys
Oregon Agricultural Experiment Station
Oregon Cooperative Snow Surveys
Oregon State Engineer and Corps of
State Watermasters
Utah Cooperative Snow Surveys
Wyoming Cooperative Snow Surveys

#### Federal:

- U. S. Army Engineers
- U. S. Department of Agriculture
  Forest Service
  Agricultural Research Service
- U. S. Department of Commerce Weather Bureau
- U. S. Department of the Interior
  Bonneville Power Administration
  Bureau of Reclamation
  Fish and Wildlife Service
  Geological Survey
  Indian Service
  National Park Service
  Bureau of Land Management

#### PUBLIC UTILITIES

The Montana Power Company Washington Water Power Company Idaho Power Company Utah Power and Light Company

#### ORGANIZED PUBLIC AGENCIES

Big Lost River Irrigation District
Boise Project Board of Control
Little Wood River Irrigation District
Jordan Valley Irrigation District
Salmon Falls Creek Irrigation Company
Twin Falls Soil Conservation District
Twin Lakes Irrigation Company
Big Wood Irrigation Company
Owyhee Project - North & South Board of Control

#### PRIVATE CORPORATIONS

Amalgamated Sugar Company

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